



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,201	03/10/2004	Noboru Segawa	086531-0136	2432
22428 EOLEV AND	7590 <u>11/21/2007</u>	EXAMINER		
FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			MCCRACKEN, DANIEL	
			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20007			1793	
			MAIL DATE	DELIVERY MODE
			11/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

·	Application No.	Applicant(s)			
	10/796,201	SEGAWA ET AL.			
Office Action Summary	Examiner	Art Unit			
	Daniel C. McCracken	1793			
The MAILING DATE of this communication ap	opears on the cover sheet with the c	orrespondence address			
Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPI WHICHEVER IS LONGER, FROM THE MAILING I - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the maili earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION .136(a). In no event, however, may a reply be tind d will apply and will expire SIX (6) MONTHS from te, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 14.	September 2007.				
2a)⊠ This action is FINAL . 2b)□ Th	This action is FINAL . 2b) This action is non-final.				
3) Since this application is in condition for allow	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Disposition of Claims	(
4)⊠ Claim(s) <u>1-12</u> is/are pending in the application.					
4a) Of the above claim(s) <u>4-12</u> is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6) Claim(s) 1-3 is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and	or election requirement.				
Application Papers					
9)☐ The specification is objected to by the Examir	ner.				
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the E	Examiner. Note the attached Office	Action or form PTO-152.			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a lis	st of the certified copies not receive	ed.			
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) [] Interview Summary Paper No(s)/Mail D				
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal F 6) Other:	Patent Application			

Application/Control Number:

10/796,201

Art Unit: 1793

DETAILED ACTION

Citation to the Specification will be in the following format (S. #: ¶) where # denotes the page number and ¶ denotes the paragraph number. Citation to patent literature will be in the form (Inventor #: LL) where # is the column number and LL is the line number. Citation to the pregrant publication literature will be in the following format (Inventor #: ¶) where # denotes the page number and ¶ denotes the paragraph number.

Response to Arguments

Applicants' correction of the informalities in the Specification as noted in the Non-final Office Action dated 11/16/2007 will be entered. The objection is withdrawn. With respect to the statement in regards to listing references in the specification versus on the IDS, this statement was improvidently made. The two Japanese publications (5-317639 and 10-85533) have been considered, but only insofar as the translated abstract indicates. "The duty of candor does not require that the applicant translate every foreign reference, but only that the applicant refrain from submitting partial translations and concise explanations that it knows will misdirect the examiner's attention from the reference's relevant teaching." *Semiconductor Energy Laboratory Co. v. Samsung Electronics Co.*, 204 F.3d 1368, 1378, 54 USPQ2d 1001 1008 (Fed. Cir. 2000).

At the outset, it is noted that Applicants have utilized "absorbing" and "adsorbing" seemingly interchangeably throughout their remarks. The Examiner presumes this was mistaken and inadvertent. Of course, adsorption and absorption are two different mass transfer processes. The Examiner is interpreting the claims to require adsorption, as drafted.

10/796,201 Art Unit: 1793

Applicants arguments with respect to Cirillo center around the reference's alleged failure to disclose "adsorbing and carrying carbon monoxide generated through an incomplete combustion in a CO area." (Remarks of 9/14/2007 at p. 7, ¶1). Assuming *arguendo* that Applicants are correct, this is immaterial, as this limitation was cancelled in Claim 1. Applicants further argue that Cirillo does not show the "ozone decomposing area and the CO absorbing [sic] area [being] formed in a common reaction area." The Examiner respectfully disagrees.

First, with respect the newly added limitation, "in which the carbon monoxide is adsorbed and carried," this limitation does not add anything of patentable significance. To say that carbon monoxide as adsorbed in the CO adsorbing area is redundant. The "carried" limitation is somewhat puzzling. The Examiner is interpreting this to mean that there is some sort of bulk flow of CO, *i.e.* CO is "carried." Clearly, Cirillo recites a process wherein gas - including CO - flows or is "carried." *See* (Cirillo 3: 31-31) ("a fan 4 feeds the flow of air to be treated").

As to Applicants' arguments that Cirillo does not disclose the combination of an ozone "decomposing substance" with a "CO adsorbing agent," Cirillo in fact does. Cirillo recites:

As regards the problem of reducing the concentration of harmful oxides, the state of the art essentially proposes catalytic oxidation based on catalysts preferably made up of precious metals such as platinum, cobalt and the like, which are activated at high temperatures. In the present invention, the oxidation is preferably promoted by a **catalytic bed 9** which is active at least at ambient temperature, said bed comprising one or more catalysts.

Representatives of catalysts of the group comprising metal oxides of the first series of the transition series or an active salt thereof are Cu(IV) oxide, NiO, Fe oxide, CuO, ZnO, MnO₂, CuCr₂O₄. Representatives of mixed catalysts are catalysts of the above mentioned group mixed with Pt, Pd, Au, or mixed catalysts of Pt, Pd, Au mixed one with the other. All the above catalysts have

Application/Control Number:

10/796,201

Art Unit: 1793

shown to be active at room temperature or a temperature slightly above the room temperature in a range from room temperature up to 50.degree. C. In a range from about 25° to 35°C particularly good results have shown Fe oxide/Pt catalysts supported on alumina.

(Cirillo 4: 11-30). Suitable "ozone decomponsing substances" can be "an oxide of Mn." (S. 7: 11). Suitable "CO adsorbing members" can comprise "platinum." (S. 7: 18). Cirillo would appear to be describing a preferred embodiment recited in the specification. See (S. 12: 21 et seq., "Fig. 3") (noting that the decomposing substance and adsorbing substance are all mixed together on what might, in conventional terms, be called a catalyst).

As to the amendments to Claim 3, Cirillo clearly recites a "path" through which gas flows. *See* (Cirillo "Fig. 2"). Carbon monoxide is oxidized. (Cirillo 3: 42-43). Finally, the "ozone decomposing area" and "CO adsorbing area" (i.e. the catalyst bed) are in the ventilation path. *See* (Cirillo 4:11 - 4:30) (discussing the catalyst bed) *and* (Cirillo "Figs 2-3").

Turning to Applicants arguments with respect to Cornwall, similar arguments are made. Like Cirillo, and as recited in the non-final office action of 6/14/2007, Cornwall recites manganese dioxide, one of the suitable "ozone decomposing substances" recited by Applicants. (Cornwall 10: 18). To the extent Cornwall may not recite any of the precious metals recited at (S. 7: 18-19), these are not required by Claim 1, only that some sort of adsorption and oxidation occurs, which it does.

Finally, with respect to amended Claim 3, Cornwall clearly recites a "path" through which the gas flows. See (Cornwall "Fig. 1"). Carbon monoxide is oxidized. (Cornwall 6: 62-63). Finally, the "ozone decomposing area" and "CO adsorbing area" (i.e. the catalyst bed,

referred to in Cornwall as a "filter element") are in the ventilation path. See (Cornwall 10:10 - 10:25) (discussing the catalyst bed or "filter 26") and (Cornwall "Fig. 1").

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

All rejections from the non-final office action dated 6/14/2007 are expressly incorporated herein by reference. To the extent any of the preceding discussion addressing Applicants amendments is necessary to support a rejection, it is expressly incorporated herein by reference.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Application/Control Number:

10/796,201 Art Unit: 1793 Page 6

Claiming the individual mass transfer and reaction steps of a normal catalytic reaction

(i.e. "decomposing area" and "adsorbing area") does not impart patentability. All amendments

made in response to this Office Action must be accompanied by a pinpoint citation to the

Specification (i.e. page and paragraph or line number) to indicate where Applicants are drawing

their support.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Daniel C. McCracken whose telephone number is (571) 272-

6537. The examiner can normally be reached on Monday through Friday, 9 AM - 6 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Stanley S. Silverman can be reached on (571) 272-1358. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Daniel C. McCracken
Assistant Examiner

DCM

Stuart L. Hendrickson

Primary Examiner